Amendments to the Specification

Please replace two (2) successive paragraphs, that begin on page 4 at line 29 and extend onto the top of page 5 which begins with the phrase "One aspect of the present invention," with the following amended paragraphs.

~~One aspect of the present invention provides an adaptation of the SMIF pod that permits receiving and holding one particular type of reticle cassette or reticle holder from among the dozens of different configurations. The present invention further provides a SMIF pod which may be interrogated to establish the particular type of reticle cassette or reticle holder carried within the SMIF pod.~~

Another object of the present invention is to provide a reticle transfer system that is capable of ascertaining the orientation of a reticle-shipping container received in a reticle reointer of the reticle transfer system.

~~Another aspect of the~~ The present invention ~~is~~ includes a reticle transfer system that:

1. receives a pair of SMIF pods that have been adapted to receive and hold one particular

type of reticle cassette or reticle holder from among dozens of different configurations;

2. interrogates each of the SMIF pods to ascertain the particular type of reticle cassette or reticle holder configuration carried by the SMIF pod; and

3. automatically moves reticles through a controlled environment from a reticle cassette or reticle holder in one of the SMIF pods to a reticle cassette or reticle holder in the other SMIF pod where the cassettes or reticle holders have differing configurations.

One aspect of the present invention is a reticle transfer system having an end effector which permits ascertaining, from a unique, machine-readable code carried by a SMIF pod, which particular type of reticle cassette or reticle holder the SMIF pod carries. A second aspect of the present invention is a reticle transfer system having a box-opening-station reticle reorienter for receiving a reticle-shipping container having at least one reticle present therein, and ascertaining the orientation thereof.

Please replace the paragraph, that begin on page 5 at line 21, which begins with the phrase "FIG. 2 is a perspective view," with the following amended paragraph.

FIG. 2 is a perspective view that depicts a base of a SMIF pod that has been adapted to receive and hold a particular type of reticle-holding cassette or reticle holder[ ];

Please replace the paragraph, that begin on page 5 at line 24, which begins with the phrase "FIG. 3 is a perspective view," with the following amended paragraph.

FIG. 3 is a perspective view that depicts a univer sal reticle transfer system that includes a plurality of SMIF pod openers which is adapted for automatically moving reticles between pairs of reticle-holding cassettes or reticle holders carried within SMIF pods, and that also includes a reticle reorienter;

installed on the pins 212. Edges of the retaining plates 216A, 216B, 218A and 218B furthest from the carrier table 214 and nearest to the pins 212 are chamfered for guiding a reticle carrier 144 onto the pins 212.

Please replace the paragraph, that begin on page 19 at line 15, which begins with the phrase "With the reticle-shipping container 140 oriented," with the following amended paragraph.

With the reticle-shipping container 140 oriented as illustrated in FIG. 14, the probe head 278 fails to sense the registration tag 158 that protrudes from an outer surface of the outer box 142. When the reticle transfer system 50 fails to find the registration tag 158, the orientation-probe arm 272 rotates away from the outer box 142 and the rotary table 262 carrying the reticle-shipping container 140 rotates 180° about the axis 264 which is oriented parallel to reticles 42 carried by the reticle carrier 144 of the reticle-shipping container 140. Having now positioned the outer box 142 in this alternative orientation, for a second time the orientation-probe arm 272 rotates about

Please replace the paragraph, that begin on page 17 at line 22, which begins with the phrase "The tilt station 200 includes," with the following amended paragraph.

The tilt station 200 includes an open, box-shaped carrier receiver 202 which is supported between two bulkheads 204A and 204B for rotation about a horizontal axis 206. In the illustration of FIG. 12A, two rows containing five ~~pin 212s~~ pins 212 each project upward from a horizontally oriented carrier table 214 included in the carrier receiver 202. A first pair of retaining plates 216A and 216B also project from the carrier table 214 respectively across opposite ends of the rows of pins 212. A second pair of retaining plates 218A and 218B similarly project from the carrier table 214 respectively parallel to and outward from the rows of pins 212. The size and arrangement of the pins 212 on the carrier table 214 adapt each of them to enter into and mate snugly with one of the apertures 182 which pierce the bottom surface 184 of the reticle carrier 144 depicted in FIG. 11B. The shape and location of the retaining plates 216A, 216B, 218A and 218B on the carrier table 214 juxtaposes them with the outer surface 174 of a reticle carrier 144

the axis 274 to juxtapose the probe head 278 with the outer surface of the outer box 142 as illustrated in FIG. 15. In this way the reticle transfer system 50 initially ensures that the orientation of the reticle-shipping container 140 places the registration tag 158 protruding from the outer box 142 near the bulkhead 256B.

Please replace the paragraph, that begin on page 21 at line 28, which begins with the phrase "Some IC fabs employ a practice of," with the following amended paragraph.

Some IC fabs employ a practice of orienting all reticles 42 but one in a reticle carrier 144 in a particular direction. The remaining reticle 42 is then oriented in an opposite direction. The orientations chosen for the reticles 42 causes all layers of patterned material to face away from the inner surface of the walls of the reticle carrier 144. Such a mixed orientation for the reticles 42 reduces the possibility that the patterned layer might become contaminated by anything present on or in the walls of the reticle carrier 144. When exchanging reticles 42 which employ such an orien-

tation in the reticle carrier 144 and a reticle cassette 36 or a reticle holder 132 present and exposed in one of the pod openers ~~52.~~ 52, the reticle transfer system 50 first places the rotary table 262 in either of the orientations depicted respectively in FIG. 18A or 18B. Having established one of these two orientations for the reticle carrier 144, the reticle transfer system 50 then effects an exchange of all properly oriented reticles 42 between the reticle carrier 144 and a reticle cassette 36 or a reticle holder 132 present and exposed in one of the pod openers 52. Those reticles 42 which are improperly oriented remain in the reticle carrier 144. After all the properly oriented reticles 42 have been exchanged, in the manner described above the reticle transfer system 50 effects a 180° of the rotary table 262 about the axis 264 into an orientation in which the remaining reticles 42 are properly oriented for an exchange between the reticle carrier 144 and a reticle cassette 36 or a reticle holder 132 present and exposed in one of the pod openers 52.